Signals

THE **ISICR** NEWSLETTER

FEBRUARY 2010 | VOLUME 17 | NO. 1

IN THIS ISSUE:

A Message from the new ISICR President, LEONIDAS PLATANIAS

I am honored to assume the responsibilities of President of the ISICR and I look forward to working with all of you to strengthen our society. I would like to thank the departing president, my colleague and friend Eleanor Fish, for her leadership and outstanding contributions to the society. Over the next couple of years we will face a number of challenges. The scientific themes and areas of interest of our society have been evolving and I believe that the society should adjust and evolve accordingly. Here are a few areas that I believe are of high importance for the society:

1. More emphasis on the broader field of cytokines. We are traditionally perceived as an interferon society, although beyond interferons we now have members with interests in other cytokine- and chemokine-related fields. Historically, this society was initially composed by IFN researchers only, but the work of many such members has evolved over the years and many are now engaged in research that is focused in different areas. Of course, interferon work remains highly important and relevant. However, it will be important for the society to emphasize other cytokine- or chemokine-related work and attract new members working in such areas.

2. Our Journal. We need to strengthen our Journal and help the editors in their efforts to raise its quality and impact factor. Ganes Sen and Tom Hamilton have been outstanding editors for the Journal of Interferon and Cytokine Research (JICR) and as president will do everything possible to help their mission and strengthen our journal.

3. More emphasis on translational research work. We need to emphasize more the translational relevance of work of society members. This will help the society with fundraising and should facilitate the interactions between basic scientists and more clinically oriented members in the society.

4. Our annual meeting. Since 2007 we have decided that we will have jointly meetings with ICS. The next joint meeting will be in Chicago, October 3-7, 2010. The meeting will be held at the Hyatt Regency Hotel in downtown Chicago in the "magnificent mile" area. An outstanding group of speakers has been assembled and the meeting will provide an exciting and enjoyable atmosphere for interaction among all participants.

5. Our relationship with ICS. We should revisit the possibility of formally joining forces with ICS.The 2 societies have much in common and it may be time to unite them in one society.

I look forward to working closely with all of you to make ISICR better and stronger.

Leon

Future ISICR Meetings

2010 Meeting
Oct. 3 - 7, 2010
Joint ISICR/ICS
Chicago, Illinois

ISICR Officers

President
Leonidas Platanias

President-elect
Charles Samuel

Secretary
Tom Hamilton

Treasurer
Bob Friedman

ISICR Newsletter Editors

Howard Young
younghow@mail.nih.gov

Seng-Lai (Thomas) Tan
tsltan@yahoo.com

ISICR
International Society for Interferon & Cytokine Research

New ISICR Award

The award given by the ISICR to the Milstein and Honorary Member awardees was changed this year to a crystal image of the human interferon alpha 2a structure. This change was made to better connect the actual award and the ISICR. In addition, for the 1st time, an award was given to the outgoing ISICR President.

Dr. Joost Oppenheim
Chief, Laboratory of Molecular Immunoregulation, Cancer and Inflammation Program, Center for Cancer Research, NCI-Frederick, Frederick, MD received recognition for his contributions to cytokine and chemokine research at the Lisbon 2009 meeting.

ISICR, ICS, & SLB
Honorary Award
WINNER

Dr. Joost Oppenheim receives an Honorary Award from all 3 societies (ISICR, ICS, SLB) at the 2009 annual meeting.

CALL FOR NOMINATIONS

MILSTEIN & HONORARY MEMBERSHIP AWARDS

ISICR DISTINGUISHED SERVICE AWARD

The Seymour and Vivian Milstein Award

Seymour Milstein (1920-2001)

Individuals who have made exceptional contributions to research related to interferons and cytokines either in a basic or clinical field and have achieved international recognition as a result of those contributions will be considered for this award. The Seymour and Vivian Milstein awards are made possible by the generous gift of the Milstein family. This award represents a pinnacle of scientific achievement in our field and is an important landmark of the society. Nominations should be communicated to the President of the ISICR by **April 1, 2010** (see below).

Honorary Membership

Nominees should be individuals who have made substantive contributions to the interferon/cytokine field over much of their careers, either in basic, clinical or applied research. Honorary members are the treasures of the society and provide us with an historical perspective and valued research tradition.

ISICR Distinguished Service Award

The ISICR will on occasion bestow this honor on an ISICR member who has made an extraordinary contribution to the society. The individual will have devoted significant time and energy over a period of years to elevating the goals of the society in furthering research on interferon, cytokines and chemokines. Nominations should be communicated to the President of the ISICR by **April 1, 2010**.

We invite your nominations for eligible candidates for The Seymour and Vivian Milstein Award and Honorary Membership, both prestigious symbols of recognition by our society for outstanding achievements and the new ISICR Distinguished Service Award. A brief (one to two page) description of the reasons for your nomination and the CV of the nominee should be sent to the ISICR President by **April 1, 2010:**

Leonidas C. Platanias, M.D., Ph.D.
Deputy Director, Robert H. Lurie Comprehensive Cancer Center Jesse, Sara, Andrew, Abigail, Benjamin and Elizabeth Lurie Professor of Oncology Professor of Medicine
Northwestern University Medical School Lurie 3-125
303 East Superior Ave
Chicago, IL 60611
Tel. 312-5034267
Fax. 312-9081372
E-mail: l-platanias@northwestern.edu

The nominations will be collated, and passed on to the Chair of the Awards Committee in May. This committee will then vote for the winners. As specified in the ISICR Constitution, the final vote of the Awards Committee is subject to the approval of the ISICR Board of Directors.

The Sidney & Joan Pestka Graduate Award for Excellence in Interferon Research and The Sidney & Joan Pestka Post-Graduate Award for Excellence in Interferon Research Sponsored by PBL InterferonSource.

Contact: Jaleel Shujath, Marketing Director, PBL InterferonSource
T: +1.732.777.9123 x117
E: jshujath@pblbio.com

Criteria: The Sidney & Joan Pestka Graduate and Post-Graduate Awards are targeted to graduate students and post-doctoral fellows who have begun to make an impact in interferon research. The Awards are designed to fill the gap among the awards currently offered by the ISICR to more senior investigators—the Young Investigator Award, the Christina Fleishmann Award, Honorary Membership, and The Seymour and Vivian Milstein Award. Candidates must be actively working in interferon research but need not be ISICR members.

Award: *$2500 cash award, $2500 travel grant, a $2500 PBL InterferonSource product credit for each awardee, and a complementary one-year ISICR membership.*

Each awardee will receive a check in the amount of $5000 payable to the awardee at the annual ISICR Awards Ceremony. Should an awardee not attend the annual ISICR meeting, a travel grant will not be awarded and that awardee will receive a check in the amount of $2500 following the ISICR meeting. Each awardee will receive a $2500 product credit from PBL InterferonSource good for one year from the date of the award. This is an annual award, and a recipient may receive an award only once.

However, an individual who receives the Graduate Award remains eligible for the Post-Graduate Award. One award will be given to a graduate student and one award to a post-doctoral fellow where candidates of suitable caliber are identified. In years where a suitable candidate is not identified, an award will not be bestowed.

Process: The Sidney & Joan Pestka Graduate and Post-Graduate Awards application package consists of a nomination form completed by an active ISICR member (NOT the nominee). Once a nomination is received from an ISICR member, the applicant will be invited to complete the application process by submitting a statement describing his/her current interferon-related research, as well as a CV. Additional supporting materials, such as posters and publications, are welcome. No proprietary or confidential information can be included in the application. Nominations will be accepted throughout the calendar year. All application materials must be received by [date of ISICR young investigator awards by **July 15, 2010** for consideration for that year's award.

A committee of ISICR/PBL scientists will review each application. The application process may also include a phone interview. The committee will make the final selection of one graduate student and one post-doctoral awardee from the pool of candidates. PBL's Marketing department will then order a crystal award with the Awardee's name engraved upon it.

Ceremony: The ISICR Awards Ceremony is generally held on the first night of the annual ISICR conference. The President & CEO of PBL will present the check and crystal award directly to the awardees after a few brief comments about the Awards and the awardees.

ISICR Milstein Young Investigator and Christina Fleischmann Awardee MINIBIOs

Milstein Award Winner
Dr. Hiroki Ishikawa

Dr. Hiroki Ishikawa obtained his Ph. D. in agricultural science under the supervision of Prof. Michihiro Kobayashi. His Ph.D. research was focused on the mechanism of host range determination of baculoviruses. After completing his doctoral studies, he joined Prof. Glen Barber's lab at University of Miami, School of Medicine (Miami) in 2006 as a postdoctoral fellow, where he is investigating the mechanism of antiviral innate immunity. Following expression cloning, he identified STING (stimulator of interferon genes) as a novel regulator of innate immunity. STING activates both NF-kB and IRF3 transcription pathway to induce expression of type I interferon and exert a potent anti-viral state following expression. In contrast, loss of STING rendered murine embryonic fibroblasts extremely susceptible to negative-stranded virus infection, including vesicular stomatitis virus. Further, STING ablation abrogated the ability of intracellular DNA-mediated type I interferon-dependent innate immunity. In the presence of intracellular DNA, STING relocalized with TANK-binding kinase 1 (TBK1) from the endoplasmic reticulum to perinuclear vesicles containing the exocyst component Sec5. Yeast two-hybrid and co-immunoprecipitation studies indicated that STING interacts with TRAPbeta which is a member of translocon. Ablation by RNA interference of both TRAPbeta and translocon adaptor SEC61beta was subsequently found to inhibit STING's ability to stimulate expression of IFN-beta. These findings revealed the important role of STING in innate signaling pathways activated by select viruses as well as intracellular DNA.

Milstein Award Winner
Dr. Xiao-Ling Li

Dr. Xiao-Ling Li obtained her M.D. degree in China where she did postgraduate work as Director of a Clinical Immunology Laboratory. In 1995 she joined Dr. Bret Hassel's laboratory at the University of Maryland as a Visiting Scientist and began her interferon research career. Her research focused on the mechanisms by which RNase-L and ISG15 mediate the biological activities of type 1 IFNs. She entered the Molecular Medicine Ph.D. program to continue work on the posttranscriptional regulation of RNase-L and its role in antibacterial immunity for her thesis project. She graduated in 2007, and her current work is investigating the mechanism by which RNase-L regulates the induction of proinflammatory cytokines. This work revealed a reciprocal regulation of RNase-L and the mRNA destabilizer, tristetraprolin which may function to tightly control the induction of cytokines. She has published 13 papers in the IFN field, serving as first author on 6, and has presented her work at 6 ISICR meetings.

Milstein Award Winner
Dr. Niamh Mangan

Dr. Niamh Mangan received her Ph.D. investigating helminth modulation of allergic responses, under the supervision of Prof. Padraic Fallon a renowned immunologist in the area of host-parasite interactions, at the School of Biochemistry and Immunology, Trinity College Dublin, Ireland, in November 2005. Dr. Mangan's research demonstrated a role for helminth parasite-induced B cells and IL-10 in allergic airway inflammation and anaphylaxis, resulting in 5 publications including the journals *J. Exp. Med.* and *J. Immunol.*

Following completion of her doctoral training, Dr. Mangan commenced as a post-doctoral Research Fellow at the Institute of Molecular Medicine, Trinity College Dublin from 2005 until 2007. Her research interests involved cellular mechanisms of modulation and suppression of the immune response, exploiting mouse models of infection and inflammation, resulting in further high impact publications including Nature Genetics, Gastroenterology and *J. Exp. Med.*. Significantly, her research studies with Prof. Fallon were invited for review in Nature Reviews Immunology, 2007.

As a result of her expertise in the area of infection and inflammation, in March 2008 Dr. Mangan was offered a position as a Research Fellow in the Interferon Research Group with Prof. Paul Hertzog, Director, Centre for Innate Immunity and Infectious Diseases at Monash Institute of Medical Research, Victoria, Australia. As a member of the Hertzog team, her post-doctoral studies assess the role of interferon receptor signaling in immune regulation in infection and inflammation. A further research goal is to elucidate novel signaling mechanisms in the interferon signaling cascade.

Milstein Award Winner
Dr. Ramtin Rahbar

Dr. Ramtin Rahbar received his Ph.D. in 2009 in Immunology from University of Toronto. Prior to receiving his Ph.D., he obtained an M.Sc. in Cellular and Molecular Medicine from the University of Ottawa. His Ph.D. project in Dr. Eleanor Fish's lab involved examining the molecular mechanisms employed by poxviruses (i.e. vaccinia virus) to utilize and subvert the host immune response. His focus has been on the utilization of T cell expressed CCR5 by vaccinia virus in both in vitro and in vivo models. Specifically, his project was aimed at understanding the role of a chemokine receptor, CCR5, on T cells in facilitating the replication and subsequent dissemination of the virus in a murine model of infection. As a result of his Ph.D research, he published two first author papers and another paper is currently under review. Dr. Rahbar is also co-author on four other publications arising from research performed in Dr. Fish's lab. In addition to his scientific research, Dr. Rahbar is a member of the University of Toronto Let's Talk Science (LTS) program where he teaches the basics of biology and conducts lab activities for high school students.

ISICR Milstein Young Investigator and Christina Fleischmann Awardee MINIBIOs *(continued)*

Milstein Award Winner
Dr. Benjamin tenOever

Dr. Benjamin tenOever completed his postdoctoral formation in Molecular Biology from Harvard University in 2007 after receiving his PhD in Medicine from McGill University in 2004. This interdisciplinary training was subsequently applied to the study of host and pathogen interactions, with a focus on the molecular biology of virus infection. In August of 2007, Dr. tenOever joined Mount Sinai School of Medicine as an Assistant Professor of Microbiology. His research focuses on the study of cellular recognition and the transcriptional response to RNA virus infections. Specific areas of interest include virus-induced cell signaling and the role of small RNAs in both virus infection and the host response. His research has been published in more than a dozen high impact journals including Science, Immunity, Nature Biotechnology and Cell. Dr. tenOever is a 2008 Pew Scholar and a recipient of the 2009 Presidential Award in Science and Engineering. Links to research/awards include: Recent interview with Science Magazine: A Scientist's Infectious Enthusiasm; PECASE Whitehouse announcement: http://www.whitehouse.gov/the_press_office/PRESIDENT-HONORS-OUTSTANDING-EARLY-CAREER-SCIENTISTS/; Pew Scholar: http://www.pewtrusts.org/news_room_detail.aspx?id=40244

Christina Fleischmann Award Winner
Dr. Caini Liu

Dr. Liu received her Ph.D. in 2003 in Biological Sciences from South Dakota State University and joined the lab of Dr. Xiaoxia Li in the Department of Immunology in the Cleveland Clinic in 2005 as a postdoctoral fellow. Her research focused on the IL-17 signaling mechanism. Her major contribution to IL-17 biology was the identification of Act1 as the key adaptor molecule in IL-17 signaling pathway *(Nat. Immunol. 8, 247-256. 2007)*. Her recent work has led to the exciting discovery that Act1 is a novel U-box E3 ubiquitin ligase whose activity is required for IL-17 signaling (*Sci. Signal.* **2**, ra63, 2009). She found that by utilizing the Ubc13/Uev1A E2 complex, Act1 mediates Lys^{63}-linked ubiquitination of tumor necrosis factor receptor-associated factor 6 (TRAF6), an important signaling component of the IL-17-mediated signaling pathway. Her current research focus is to elucidate the precise molecular mechanisms of how Act1 is involved in the IL-17 signaling pathway.

NEW ISICR MEMBERS

The ISICR welcomes these new members and looks forward to their participation in the annual meeting and ISICR activities.

Tim Doris
PBL InterferonSource, Piscataway, NJ

Stefania Gallucci
Temple Univ School of Medicine, Philadelphia, PA

Daniel Harari
Weizmann Inst of Science, Rehovot, Israel

Heather Harrington
Imperial College, London, UK

Ting Jia Memorial
Sloan Kettering Cancer Ctr, New York, NY

Stanley Lemon U
niv of Texas Med Branch, Galveston, TX

William Lesh
Tusky Organisation, Massillon, OH

Quanhai Li
Chiba Cancer Ctr Rsch Inst, Chiba, Japan

Boren Lin
Univ of Toledo, Toledo, OH

Fanching Lin
NCI-Frederick, Frederick, MD

Ravichandran
Panchanathan Univ of Cincinnati, Cincinnati, OH

Maurice Pelsers
Randox Laboratories, Spaubeek, The Netherlands

Ronald Rabin
US Food & Drug Administration (FDA), Bethesda, MD

Percy Schrottner
Inst Fur Klinische Cheme, Regensburg, Germany

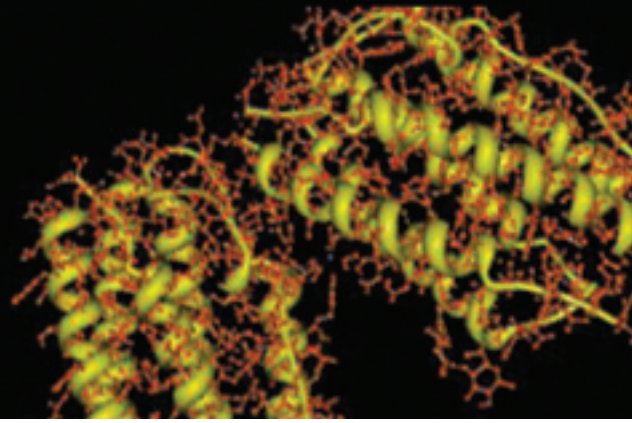
Evelien Schurgers
Rega Inst for Medical Rsch, Leuven, Belgium

Lauren Smith
Whitehead Inst, Palo Alto, CA

History of Interferon Research

A Problem for Investigators of the Origins of Interferon Research

Bob Friedman



Studying the discovery of interferons and their early history is complicated enough, but is made even more complex by the fact the lab notebooks of Alick Isaacs are at the National Library of Medicine in Bethesda, while much of the material on the early history of interferons resides at The Wellcome Trust in London. It would certainly be convenient if all of the material on the subject were at one location. I was involved inadvertently in the dispersal of these documents, and this is how it happened.

For 6 years following his tragic, premature death in 1967, the notebooks of Alick Isaacs resided in a back room of the home of his widow Sue near Hampstead Heath in London. She had asked The Royal Society, of which Isaacs had been a member, whether it would like to add these notebooks to their historic collection of material relating to their illustrious membership. When this request was refused, the notebooks were put into two large cardboard boxes for storage. In the spring of 1973, after I had been working in Ian Kerr's lab at Mill Hill for two years, the NIH was about to ship my family and myself back to Bethesda. Sue Isaacs asked whether I would be willing to take the boxes with the notebooks back with me to the NIH, and there to look for a place that might be willing to store them. Nobody in Great Britain at the time seemed to want them. Since all of my household goods were to go home in a government shipment, accommodating the two extra boxes with the notebooks would not have been an extra burden or expense for us, so I readily agreed to add them to our household goods.

After arriving home in the fall of '73, the notebooks languished in my basement for a few months while I reoriented myself to my new lab and to living back at my own country. I gave some thought to where the material ought to go, and decided, at the suggestion of Peter Olch, a medical historian, that I ought first to try to place the notebooks at the National Library of Medicine. I called the Medical History division of the library, thinking I would have to go into a long explanation of what interferons were and just who Alick Isaacs was; however, I was delighted to find that the person to whom I spoke was quite familiar with both, and he told me the NLM would be more than happy to act as a repository for this material. So, I arranged to bring them over to the NLM loading dock, and they disappeared into their collection. The last time I saw them was in 1987 when the annual meeting of the International Society for Interferon Research (as it was then called) Meeting was last held in Washington, and I put together an exhibit to mark the 30th anniversary of the discovery of interferon, which included photocopies from some of the notebooks. I was not permitted to bring the originals to the meeting, something I had suggested I might do.

Flashing forward to 1996, during the period I served as president of the ISICR, Norman Finter brought up the idea that it would be a good idea to set up an archive of documents relating to the early history of research on interferons while most of those who had participated in it were still alive. Norman had done all of the groundwork necessary to establish that The Wellcome Trust would be pleased to act as a repository for the documents we could solicit for the proposed archive. Thus an Archives Committee was constituted by ISICR, and with the help of this committee Norman and I supervised over the next 7 years the collection of the relevant material that is now in the Interferon Archive. Unfortunately, we were unable to secure the so-to-speak founding documents of the whole interferon field (indeed the whole cytokine field), as I had already donated those to the NLM, which was unwilling to part with them.

Thus, if you wish to carry out studies on the early history of interferons, you had better have not only time and patience to do so, but you must also have sufficient funds on hand to pay for several air fares between Washington and London. Sorry.

To read a short interview with Jean Lindenmann on his thoughts about his early work in Interferon research, see:

http://www.nature.com/nature/journal/v449/n7159/full/449126a.html

REVIEWS OF INTEREST

Chen, J; Liu, XS. **Development and function of IL-10 IFN-γ-secreting CD4+ T cells.** *JOURNAL OF LEUKOCYTE BIOLOGY* 86(6): 1305-1310 Dec 2009

Casey T. Weaver, **CT; Hatton RD. Opinion: Interplay between the T_H17 and T_{Reg} cell lineages: a (co-)evolutionary perspective.** *NATURE REVIEWS IMMUNOLOGY* 9(12): 883-889 Dec 2009

Deknuydt, F; **Scotet, E; Bonneville, M. Modulation of inflammation through IL-17 production by γδ T cells: Mandatory in the mouse, dispensable in humans?** *IMMUNOLOGY LETTERS* 127(1): 8-12 Dec 2009

Gale Jr, M; **Sen, GC. Viral Evasion of the Interferon System.** *JOURNAL OF INTERFERON & CYTOKINE RESEARCH* 29(9): 475-476 Sept 2009 **NOTE:** This issue has many reviews on different virus families and their effects on the Interferon system

Hercus, TR; Thomas, D; Guthridge, MA; Ekert, PG; King-Scott, J; Parker, MW; Lopez, AF. **The granulocyte-macrophage colony-stimulating factor receptor: linking its structure to cell signaling and its role in disease.** *BLOOD* 114(7): 1289-1298 Aug 2009

Howlett, M.; Menheniott, T. R.; Judd, L. M.; Giraud, A. S. **Cytokine signaling via gp130 in gastric cancer**. *BIOCHIMICA ET BIOPHYSICA ACTA-MOLECULAR CELL RESEARCH* 1793(11): 1623-1633 Nov 2009

Lalvani, A; Pareek, M. **Interferon gamma release assays: principles and practice.** *ENFERMEDADES INFECCIOSAS MICROBIOLOGIA CLINICA.* Sept 2009

McFadden, G; Mohamed, MR; Rahman, MM; Bartee, E. **Cytokine determinants of viral tropism.** *NATURE REVIEWS IMMUNOLOGY* 9(9): 645-655 Sept 2009

Monie, TP; Bryant, CE; Gay, NJ. **Activating immunity: lessons from the TLRs and NLRs.** *TRENDS IN BIOCHEMICAL SCIENCES* 34(11): 553-561 Nov 2009

Palmer, DC; Restifo, NP. **Suppressors of cytokine signaling (SOCS) in T cell differentiation, maturation, and function.** *TRENDS IN IMMUNOLOGY* 30(12): 592-602 Dec 2009

Ransohoff, RM. **Chemokines and Chemokine Receptors: Standing at the Crossroads of Immunobiology and Neurobiology.** *IMMUNITY* 31(5): 711-721 Nov 2009

Seuntjens, E; Umans, L; Zwijsen, A; Sampaolesi, M; Verfaillie, CM; Huylebroeck, D. **Transforming Growth Factor type , and Smad family signaling in stem cell function.** *CYTOKINE & GROWTH FACTOR REVIEWS* 20(5-6): 449-458 Oct-Dec 2009

The Real Final Exam

The Prostate Jun 1 39(4):323–325 (1999)
© 1999 Wiley-Liss, Inc.
Reprinted with permission of
John Wiley & Sons, Inc.

Donald S. Coffey
Professor of Urology, Oncology, and Pharmacology
Brady Urological Institute, The Johns Hopkins University
School of Medicine, Baltimore, Maryland

Editor's Note: Every departing Medical Student, Graduate Student, Urology ResearchResident, and Post-Doctoral Fellow trained in Dr. Donald S. Coffey's laboratory or classroom for 4 decades has been given this "real final exam"—in either oral, written, or both forms. Some believe the wisdom in it passed on to the next generations of cancer researchers is as vast and generous and dedicated to the eradication of cancer as the heart of its author. Coffey passed the test, and then disseminated the answers for all students-now including those new, young 21st Century investigators at this meeting.

THE REAL FINAL EXAM

(SOME THOUGHTS TO PONDER ALONG YOUR WAY)

I have no more insight into science than many others; I was just naive enough to list the obvious to which most of us are blinded because of measurements by false yardsticks and examples which are always in vogue. I know that with time you can expand and improve your own list. In my weakness, I give students so many sheets or handouts of useless data to memorize that I thought a few important concepts might be worth sharing with you.

1. IF THIS IS TRUE, WHAT DOES IT IMPLY?

Calculate the time it takes to do an experiment, then put down the percent of time you actually thought about the results; you will be lucky if it is 10%. We usually don't need more experiments, we need more clear thinking. If you can practice this to an art, you will always have new ideas and insight. Inhibitions to generate ideas and present trends and concepts, tend to paralyze this important process.

2. GENERATE MORE THAN *ONE* CONCEPT TO EXPLAIN YOUR DATA, THEN GIVE ALL POSSIBILITIES EQUAL ATTENTION AND EFFORT.

Your *pet* theory . . . . will usually turn out to be just that.

3. YOU DON'T HAVE TO *ASSUME* ANYTHING THAT YOU CAN *PROVE*.

"When you assume, you are going to make an *ASS-of U* and *ME*" - Coach, in *Bad News Bears*.

4. THE EXPERIMENT THAT DIDN'T COME OUT THE WAY *YOU* THOUGHT IT WOULD, IS THE ONLY EXPERIMENT THAT IS REALLY GOING TO TEACH YOU SOMETHING *NEW*.

The key observations are usually "swept under the rug" or rationalized away. The one fact that doesn't fit the theory is always the most important fact.

5. EVERY DATUM IS SCREAMING TO TELL YOU SOMETHING, BUT YOU MUST DO THE LISTENING AND THINKING.

If it isn't worth *thinking* about, it wasn't worth *doing*. A burning curiosity is the "ATP" of the laboratory.

6. WHAT YOU ARE THINKING ABOUT WHILE YOU ARE COMING TO WORK DETERMINES YOUR REAL INTEREST. . . . AND WILL DIRECT YOUR ACCOMPLISHMENTS FOR THE DAY.

7. A COMPLEX EXPERIMENT IS USUALLY THE LEAST PRODUCTIVE.

A 500 tube experiment is very susceptible to Murphy's first law. Don't try to answer it all at once. Do a *few* things *right*. Too much phenomenology provides more complexity and little insight.

8. IT IS TIME TO DO SOME EXPERIMENTS, OTHERS MUST WAIT.

There are many experiments worth doing but only a few great ones. Don't do the next experiment to come to mind. Try to think up a critical experiment that will go to the heart of the question.

9. YOU ARE GOING TO BE SURPRISED AT THE SIMPLICITY AND BEAUTY OF THE REAL ANSWER.

Almost a billion years went into selecting the system that you are studying. Remember, Crick and Watson didn't make the double helix, they only discovered an ancient system still operating today. It had plenty of time to be perfected.

10. ALL NEW IDEAS ARE RESISTED BY *YOU* - AUTHORITIES - THE EDITORS - STUDY SECTIONS - DEPARTMENT CHAIRMEN - PEERS – AND FRIENDS. IF THIS DISCOURAGES YOU, YOU SHOULD RETIRE EARLY. HOWEVER, MOST CRITICISM CAN BE CONSTRUCTIVE IF YOU LISTEN WITH AN OPEN MIND.

There is a fine line between being persistent and being bullheaded. Remember, no one can make you feel inferior without *your* consent. Don't give it. If your ideas are easily accepted, they are probably wrong. Most of the real great discoveries were first rejected and turned down for publication. There is a direct relationship between the unusual nature of a new discovery and the resistance to acceptance.

11. A GOOD PAPER IS SIMPLE, CLEAR AND TO THE POINT.

If the average reviewer can't understand your point, the average reader probably won't either; the reviewer usually spends more time with your paper. You know what you did, but you won't be there to explain it to the reader. You don't have to tell them every experiment you did and bore them to tears, just be sure they understand the most critical ones. A paper can be correct but not informative to the average reader. An example - read your insurance policy. Someone is going to try to confirm your observation; make it easy for them to repeat your work.

12. IF TWO GOOD INVESTIGATORS DISAGREE AND A PARADOX SEEMS TO EXIST, BOTH OF THEIR DATA ARE PROBABLY CORRECT, AND WE JUST NEED A NEW EXPLANATION TO ENCOMPASS BOTH OBSERVATIONS.

Never assume that those who oppose your ideas are stupid. The more you disagree with the data of others, the less chance you have of finding the truth. Try to devise a model that also integrates as many observations of others as possible. All good experiments must be accounted for in the end. You are not the only one who can do a good experiment.

13. GIVE EVERYONE CREDIT.

You are not the first one to study this problem,nor will you be the last. Remember, the ones reviewing and judging your paper have already worked in the same field and they also know who did what. Give the true credit where it is due. Your reputation will be made by *all* of your studies and by how professional you are.

14. DO NOT BE FOOLED BY THE AUTHORITY OF THE PRINTED PAGE.

The observation of the "proof" might be correct, but *how* was the experiment conducted? Most of what you and I think today will appear silly in 20 years. At least, we can do our best. Keep in mind the limitations and state them.

15. MANY BRIGHT PEOPLE ARE PARALYZED BY NEGATIVE THINKING.

They are often busy trying to prove someone wrong instead of trying to find out what is right or new. Every experiment, yours and others, is limited and is only an approximation. Look for clues because few things are ever proven. Test all theories.

16. THE MOST IMPORTANT INGREDIENTS ARE HONESTY, DESIRE, CLEAR THINKING, CONFIDENCE AND HARD WORK.

If *you* aren't willing to *work* long, *hard* hours and sacrifice in pursuit of this goal, then you are not willing to pay the price and maybe you should move over and give someone else a chance.

IN CONCLUSION: If you are lucky, the world will be paying you a modest salary for what you consider your hobby, and you, in turn, will be contributing to some important answers for our present and future society. As you teach and lead, you will amplify your efforts and those of others, and if appropriate, the influence will continue after you cease. What you learn from courses, lectures and books that are reflected in your course grades will be a very *small* fraction of *your* FINAL EXAM. Good luck in your careers.

Clinical Trials

Interleukin-1 Receptor Antagonist and Insulin Sensitivity.
ClinicalTrials.gov Identifier: NCT00928876
Location: Netherlands Rabdoud University Nijmegen Medical Centre.
Study Chair: C J Tack, Prof Dr Radboud University
Contact: Edwin JP van Asseldonk, Drs +31-24-9857
e.vanasseldonk@aig.umcn.nl

Ultra-Low Dose Interleukin-2 for Refractory Chronic Graft Versus Host Disease.
ClinicalTrials.gov Identifier: NCT00529035.
Location: Dana-Farber Cancer Institute Boston, MA.
Principal Investigator: John Koreth, MBBS, D.Phil Dana-Farber Cancer Institute.
Contact: John Koreth, MBBS, D.Phil. 617-632-2949
jkoreth@partners.org
Contact: Kimberly Phillips 617-632-6362
kimberly_phillips@dfci.harvard.edu

Randomized Study of Polyethylene-Glycol-Conjugated Interleukin 2 in Patients With Common Variable Immunodeficiency.
ClinicalTrials.gov Identifier: NCT00004695.
Location: Mount Sinai School of Medicine.
Study Chair: Charlotte Cunningham-Rundles Mount Sinai School of Medicine.

Interferon Alfa and Interleukin-6 in Treating Patients With Recurrent Multiple Myeloma.
ClinicalTrials.gov Identifier: NCT00470093.
Location: Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins Recruiting Baltimore, MD.
Study Chair: Carol A. Huff, MD Sidney Kimmel Comprehensive Cancer Center.
Contact: Clinical Trials Office - Sidney Kimmel Comprehensive Cancer Center 410-955-8804
jhcccro@jhmi.edu

Interleukin-7 in Treating Patients With Metastatic Melanoma or Locally Advanced or Metastatic Kidney Cancer.
ClinicalTrials.gov Identifier: NCT00492440.
Location: Warren Grant Magnuson Clinical Center - NCI Clinical Trials Referral Office Bethesda, MD.
Study Chair: Steven A. Rosenberg, MD, PhD NCI - Surgery Branch
Contact: Clinical Trials Office - Warren Grant Magnusen Clinical Center 888-NCI-1937.

Interleukin-11 (IL-11) in Moderate or Mild Hemophilia A or Von Willebrand Disease (VWD) Unresponsive to Desmopressin Acetate (DDAVP).
ClinicalTrials.gov Identifier: NCT00994929.
Location: University of Pittsburgh, Pittsburgh, PA.
Principal Investigator: Margaret V. Ragni, MD, MPH University of Pittsburgh.
Contact: Margaret V. Ragni, MD, MPH (412) 209-7288
ragni@dom.pitt.edu
Contact: Kristen Jaworski, BSN, RN (412) 209-7411
kjaworski@itxm.org

Interleukin-12 Followed by Interferon Alfa in Treating Patients With Advanced Cancer.
ClinicalTrials.gov Identifier: NCT00003451.
Location: Arthur G. James Cancer Hospital - Ohio State University Columbus, OH.
Study Chair: William E. Carson, MD Arthur G. James Cancer Hospital & Richard J. Solove Research Institute.

Vaccine Therapy and Interleukin-12 With or Without Interleukin-2 in Treating Patients With Metastatic Melanoma.
ClinicalTrials.gov Identifier: NCT00064168.
Location: University of Chicago Cancer Research Center Chicago, IL.
Study Chair: Thomas F. Gajewski, MD, PhD University of Chicago.

An Exploratory Study of the Effects of a Single Dose of QAX576 (an Interleukin-13 Monoclonal Antibody) on Simulated Hayfever.
ClinicalTrials.gov Identifier: NCT00584584.
Location: Novartis Investigator Site Hannover, Germany.
Principal Investigator: NOVARTIS Novartis investigator site.

Combination Study Of SB-485232 (Interleukin-18) And Doxil For Advanced Stage Epithelial Ovarian Cancer.
ClinicalTrials.gov Identifier: NCT00659178.
Location: GSK Investigational Site Stanford, CA.
Study Director: GSK Clinical Trials GlaxoSmithKline.
Contact: US GSK Clinical Trials Call Center 877-379-3718.

Interleukin-21 in Treating Patients With Metastatic or Recurrent Malignant Melanoma.
ClinicalTrials.gov Identifier: NCT00514085.
Location: Edmond Odette Cancer Centre at Sunnybrook Recruiting Toronto, Ontario, Canada.
Study Chair: Teresa M. Petrella Edmond Odette Cancer Centre at Sunnybrook.
Contact: Teresa M. Petrella 416-480-5248

Characterization of Interferon Beta -1b-Induced Tolerizing Effect in Dendritic Cells.
ClinicalTrials.gov Identifier: NCT00630721.
Location: University of North Carolina Recruiting Chapel Hill, NC.
Principal Investigator: Silva Markovic-Plese, MD UNC Chapel Hill.
Contact: Liseanne Fedor-Hammonds, BS 919-843-7857 hammondsl@neurology.unc.edu

Interferon-Gamma or Aldesleukin and Vaccine Therapy in Treating Patients With Multiple Myeloma.
ClinicalTrials.gov Identifier: NCT00616720.
Sponsor: Mayo Clinic
Study Chair: Martha Q. Lacy, MD Mayo Clinic

The Treatment of Uveitic Cystoid Macular Edema With Topical Interferon Gamma.
ClinicalTrials.gov Identifier: NCT00943982.
Location: National Institutes of Health Clinical Center, 9000 Rockville Pike Bethesda, MD.
Sponsor: National Eye Institute.
Contact: Patient Recruitment and Public Liaison Office (800) 411-1222 prpl@mail.cc.nih.gov

Cytokines in the News

HGS/Novartis interferon-alpha
http://finance.yahoo.com/news/Human-Genome-Seeks-zacks-1541954708.html?x=0&.v=1

IL-17 and H1N1
http://laikaspoetnik.wordpress.com/2009/12/18/overproduction-of-th1-and-th17-cytokines-may-be-the-clue-to-why-some-h1n1-patients-get-very-ill/

Novo Nordisk licences anti-IL-21 from Zymogenetics
http://finance.yahoo.com/news/Novo-Nordisk-Licenses-IL21-bw-627787204.html?x=0&.v=1

Anti IL-5
http://www.redorbit.com/news/health/1790013/ception_therapeutics_and_cephalon_provide_initial_results_of_a_phase/index.html?source=health

AAI Annual Meeting – Baltimore, MD ISICR Guest Symposium

Immunobiology of IL-10 Family Members
Monday, May 10, 10:15 AM - 12:15 PM - BCC Room 308
Chair: Grant Gallagher, HUMIGEN, the Institute for Genetic Immunology
Co-chair: Reen Wu, University of California Davis

* Reen Wu, University of California Davis, Regulation of airway mucosal immunity by IL-19
* Kerstin Wolk, University Hospital Charite, IL-20 and IL-22: biology and role in disease
* Elizabeth A. Grimm, University of Texas, MD Anderson Cancer Center, IL-24, an IL-10 family cytokine with immunostimulatory and tumor suppressor functions
* Grant Gallagher, HUMIGEN, the Institute for Genetic Immunology, Regulation of interferon lambda-1 (IL-29) in airway epithelium

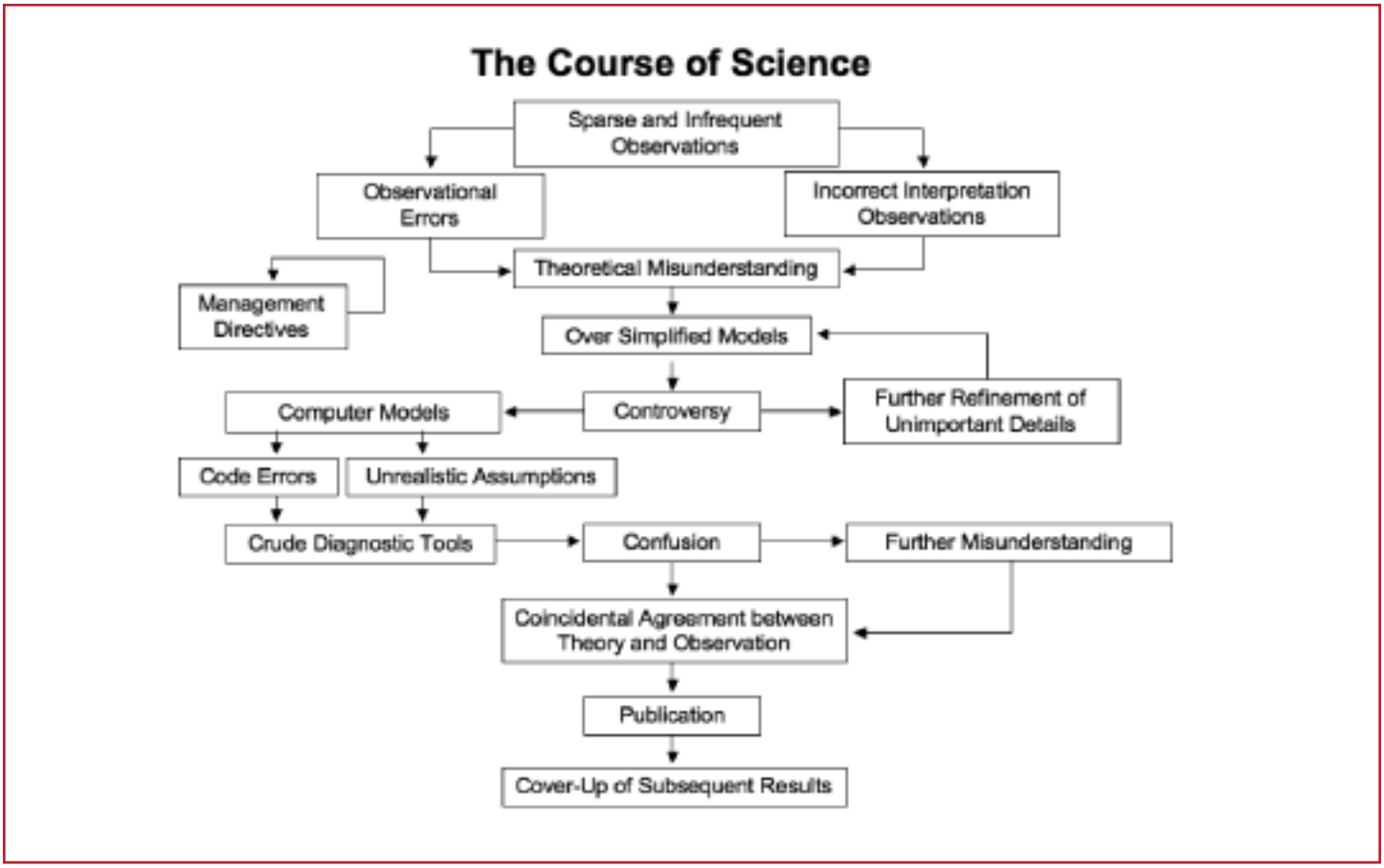
Hôpital général juif
Jewish General Hospital

Postdoctoral/Graduate Program Opportunities

INSTITUT LADY DAVIS DE RECHERCHES MÉDICALES / LADY DAVIS INSTITUTE FOR MEDICAL RESEARCH

The laboratory of Drs. John Hiscott and Rongtuan Lin is seeking to recruit Ph.D. students and/or Post-doctoral trainees who are interested in molecular regulation of virus-host interactions. Specifically, research programs in the laboratory include: molecular interactions regulating the host innate immune response to RNA virus infection; pathogenesis and gene regulation in human retrovirus infection; and development of oncolytic virotherapy for cancer.

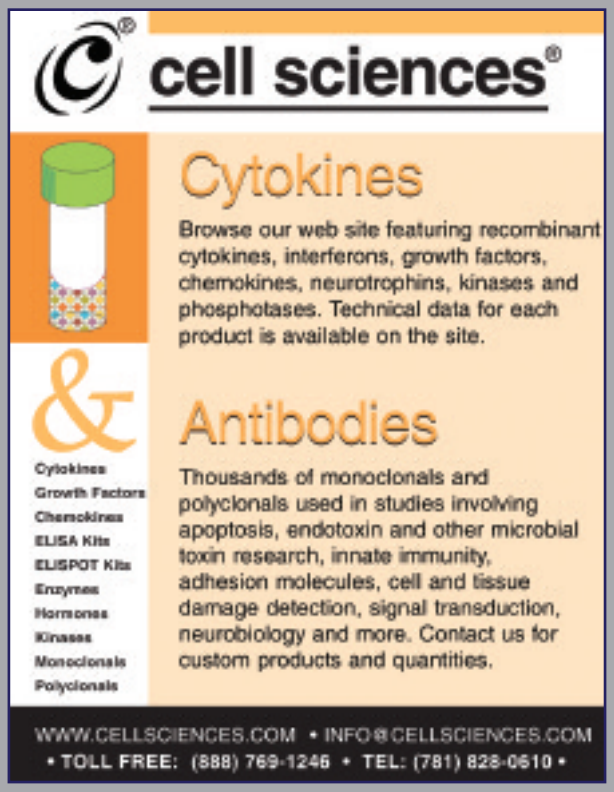
Research projects include: mechanisms used by HCV and influenza to evade the host immune response, evaluation of how signaling to the innate immune response may shape adaptive immunity and establishment of new strategies to boost the immune response to effectively fight these viruses Laboratory website: www.johnhiscottlab.ca. Please consult PubMed for a complete list of relevant publications. Candidates with a strong background in the areas of molecular and cellular biology, virology, immunology or protein biochemistry are encouraged to apply. Strong written and oral communications skills are necessary. Postdoctoral candidates must have published at least 1 first author paper. Any appropriate combination of education, certifications, and/or relevant work experience will be considered. Applicants are invited to forward their CV and letter of intent to Drs. Hiscott or Lin by e-mail: john.hiscott@mcgill.ca; rongtuan.lin@mcgill.ca



From: http://www.bealecorner.org/best/funny/scifunny.html

ISICR

Silver Sponsors



CELL SCIENCES
www.CellSciences.com

BIOLEGEND
www.Biolegend.com

WWW

Bio Resource

http://www.biorag.org/

Bio Resource for array genes is a free online resource for easy access to collective and integrated information from various public biological resources for human,mouse,rat, fly and c.elegans genes. This database is provided by the Arizona Cancer Center and Southwest Environmental Health Sciences Bioinformatics Core. The resource includes information about the genes that are represented in Unigene clusters. The database is dynamically updated once a week.

This resource provides interactive tools to selectively view, analyze and interpret gene expression patterns against the background of gene and protein functional information. Different query options are provided to mine the biological relationships represented in the underlying database. Search button will take you to the list of query tools available. To know more about this resource, go to the Overview and the Help section.

Cell Death

http://www.celldeath.de/

CellDeath.de presents the Apoptopedia, which is an encyclopedia that contains apoptosis, signal transduction and cancer related terms. Everybody interested in this field is cordially invited to contribute to the content of this website.

DAVID

http://david.abcc.ncifcrf.gov/

The Database for Annotation, Visualization and Integrated Discovery (DAVID) 2008 is the sixth version of our original web-accessible programs. DAVID now provides a comprehensive set of functional annotation tools for investigators to understand biological meaning behind large list of genes. For any given gene list, DAVID tools are able to:

☑ Identify enriched biological themes, particularly GO terms
☑ Discover enriched functional-related gene groups
☑ Cluster redundant annotation terms
☑ Visualize genes on BioCarta & KEGG pathway maps
☑ Display related many-genes-to-many-terms on 2-D view.
☑ Search for other functionally related genes not in the list
☑ List interacting proteins
☑ Explore gene names in batch
☑ Link gene-disease associations
☑ Highlight protein functional domains and motifs
☑ Redirect to related literatures
☑ Convert gene identifiers from one type to another.
☑ And more

FunDO

http://django.nubic.northwestern.edu/fundo

FunDO takes a list of genes and finds relevant diseases based on statistical analysis of the Disease Ontology annotation database. For a detailed description of how the database is generated from GeneRIFs, see the paper in BMC Genomics at http://www.biomedcentral.com/1471-2164/10/S1/S6.

GeneRIF – Gene Reference Into Function

http://www.ncbi.nlm.nih.gov/projects/GeneRIF/

GeneRIF provides a simple mechanism to allow scientists to add to the functional annotation of genes described in Entrez Gene. To be processed, a valid Gene ID must exist for the specific gene, or the Gene staff must have assigned an overall Gene ID to the species. The latter case is implemented via records in Gene with the symbol NEWENTRY. Once the Gene ID is identified, only three types of information are required to complete a submission:

1. a concise phrase describing a function or functions *(less than 255 characters in length, the title of the paper will not be accepted);*
2. a published paper describing that function, implemented by supplying the PubMed ID of a citation in PubMed;
3. a valid e-mail address *(which will remain confidential).*

Access to the submission form is provided from the Bibliography section of the Entrez Gene default report view, so you don't have to retype the Gene ID or other identifiers (details below).

GeneRIFs are intended to facilitate access to publications documenting experiments that add to our understanding of a gene and its function. Reports based solely on computational analyses are not in scope.

GeneWeaver

http://www.cs.ucl.ac.uk/staff/K.Bryson/geneweaver/

The GeneWeaver project involves the development of a flexible system for automatic genome analysis and annotation.
The project is funded by the BBSRC/EPSRC Bioinformatics Initiative. A number of stages are involved in genome analysis, these include:

- Assembly of contigs generated by sequencing machines.
- Detection of open reading frames (ORFs) in the assembled genome.
- Assignment of functional descriptions to the proteins.
- Assignment of structural features to the proteins.
- Detection of regulatory units such as promoters, enhancers and silencers.
- Construction of metabolic pathways for the organism by considering the different gene products.

Other groups have already written successful bioinformatics software to perform the analysis required for a number of these steps. GeneWeaver provides an architecture which integrates these applications into a single system which can automatically analyse genomes and also efficiently manage the data generated.

Inkycircus

http://www.inklingmagazine.com/inkycircus/about/

We are three science journalists who used to all live in London and are now divided between England and Vancouver, Canada. You can read all about our super fun troubles with immigration here. (http://www.inkycircus.com/jargon/2006/05/so_long_farewel.html)

In our spare time, the Canadian team is still trying to start a science magazine for women. Ish. It is still hard and still sometimes makes us want to cry. So we continue writing for the circus.If you want the real backstory about our operation then read this post (http://www.inkycircus.com/jargon/2005/10/the_higher_purp.html) It's longer, better written and has more pictures. Site recommended by Kevin Ahearn in Genetic Engineering News

Nobel Jobs

http://www.nobel-jobs.com/

Worldwide jobs in the Life Sciences

Pathway Builder

http://www.proteinlounge.com/PBTool/ListPathwayThumb.aspx

Pathway Builder is the fastest and the easiest method of drawing signal transduction pathways. Pathway Builder contains many pre-made pathway templates and illustration items. Note: you do need to sign up for a free account to enter the site.

Quertle

http://www.quertle.info/v2/

FREE, relationship-driven literature search site! Quertle uses advanced semantic-based searching to find the most relevant documents. Let Quertle save you from drowning in your literature search results.

What's New in v2

- **Full-text documents -** Search within the full article, including Methods. An initial collection of full-text articles (from the 200+ journals from BioMed Central) have been added; more coming soon.
- **New User-interface -** Easier to use, with more hints to help users get the most out of relationship searching
- Relationships now Organized by Document - The relevant relationships from each article are now grouped together
- **Sorting Results by Date -** New option for viewing results
- **Power Terms™ -** Many new Power Terms, representing entire classes of entities, have been added. See the full list of Power Terms here.

SubpathwayMiner: Annotation and identification of the KEGG pathways

http://cran.r-project.org/web/packages/SubpathwayMiner/

SubpathwayMiner is an R-based software for flexible pathway identification. (1) SubpathwayMiner can provide users with sub-pathway annotation and identification of metabolic pathways based on enzyme commission (EC) numbers. (2) SubpathwayMiner can provide users with sub-pathway annotation and identification based on KEGG Orthology (KO) identifiers. (new!) (3) SubpathwayMiner can provide annotation and identification of entire pathways. (4) SubpathwayMiner can support most of organisms in the KEGG GENE database. (5) Data can be automatically updated on demand by the user.

Talking Glossary of Genetic Terms

http://www.genome.gov/glossary/

The National Human Genome Research Institute (NHGRI) created the Talking Glossary of Genetic Terms to help everyone understand the terms and concepts used in genetic research. In addition to definitions, specialists in the field of genetics share their descriptions of terms, and many terms include images, animation and links to related terms.

ISICR Committee Meeting Reports

MILSTEIN & HONORARY MEMBERSHIP AWARDS

ISICR DISTINGUISHED SERVICE AWARD

ISICR Board of Directors

Meeting Date: **October 18, 2009**
Location: **Lisbon Portugal**

1. Membership of the Awards Committee was considered at the request of Drs. Kathy Zoon and Bob Silverman. It was determined that:
   (a) Kathy Zoon's term would be extended for a further 3 years.
   (b) Bob Silverman will remain as Chair. In addition, the BOD agreed that Dr. Silverman should identify new members to replace individuals who will complete terms of service.
2. It was recommended that the ISICR should create an award for extraordinary service to the Society and that such an award should be presented to the Milstein Family. This was unanimously endorsed by BOD. Bob Silverman will prepare a proposal for this for future discussion with the BOD.
3. Dr. Ganes Sen proposed the development of a new Distinguished Leadership Award. This was unanimously endorsed by BOD. This award will be through a continuous nomination process open to the full membership of the Society. The Awards Committee will review nominees with final approval by the BOD.
4. Travel Awards given by the Society will continue to be ranked on basis of both quality and location.
5. Dr. David Wallach has submitted a proposal for development of Meeting Sponsorship. After substantial discussion, the BOD endorsed this concept. This proposal is also being discussed by the BOD of the ICS. An ISICR member will be identified to work with David to further develop the strategy.
6. Dr. Fish provided an update on organization of joint meetings summarized from the earlier Meetings Committee. The following schedule is in place. Chicago 2010, Florence, 2011. Proposals for Geneva in 2012 and Melbourne in 2013 are being considered. Details are provided in the report of the Meetings Committee.
7. Bob Fleishmann, Chair of the Publications Committee, made a proposal to have subscription to the Journal of Interferon and Cytokine Research be included as part of ISICR membership. There was extensive discussion regarding the success of past electronic access through PBL website and access provided to many members through institutional subscription. It was decided that the Society could purchase electronic access to all members without increasing membership dues if (a) the per member cost was at or less than $30 and (b) the publisher would consider strategies to help make this cost-neutral by providing comparable support for meetings or awards. Bob Fleishmann was asked to present this to Vicki Cohn, the managing editor at Mary Ann Liebert Inc and report back to BOD.

Respectfully submitted,
Tom Hamilton
Secretary, ISICR

ISICR Awards Committee

Meeting Date: **October 18, 2009**
Location: **Lisbon, Portugal**

Present: Robert Silverman (Chairperson), Katherine Zoon (Co-chair), Peter Staeheli, Jeanne Wietzerbin, Takashi Fujita
Absent: Michael Gale, Daniela Novick

In 2009 about $42,500 was distributed to participants at the annual meeting in Montreal for Seymour & Vivian Milstein Travel Awards. Amounts of the travel awards were based on the quality of the abstracts and the distance the person had to travel.

In addition, there were two winners of the Seymour and Vivian Milstein Award (Drs. Peter Staeheli and Glen Barber); two Honorary Members (Dr. Sidney Grossberg and Dr. Charles Weissmann); five winners of The Seymour and Vivian Milstein Young Investigator Award (Hiroki Ishikawa, Benjamin

TenOever, Niamh Mangan, Xiao-Ling Li and Ramtin Rahbar), and a winner of The Christina Fleischmann Award to Young Women Investigator (Caini Liu).

Reappointments and new additions to the ISICR Awards Committee were discussed and recommendations will be forwarded to the ISICR President to obtain approval. The possibility of special award categories was discussed for future meetings. Travel awards will continue to be granted based on the scientific judging of abstracts and on the distance to be traveled.

Respectfully submitted,
Robert Silverman

Joint ISICR/ICS Meetings Committee

Meeting Date: **October 18, 2009**
Location: **Lisbon, Portugal**

The meeting was called to order on Sunday, October 18, 2009. The meeting was well-attended. The following attendees at this meeting represented the ISICR: Yoichiro Iwakura, Santo Landolfo, Allen Lau, Nancy Reich, Michael Tovey, and Leon Platanias. The following attendees represented the ICS: Scott Durum, Alberto Mantovani, Amanda Proudfoot, John Schrader, John Sims, and David Wallach.

Also attending were guests from the ISICR Board of Directors (Eleanor Fish) and Paul Hertzog and Cem Gabay as guests presenting proposals for future meetings. The meeting was co-chaired by Christine Czarniecki (ISICR) and John Schrader (ICS) filling in for Carl Ware (ICS).

2008 – Montreal, Canada

John Hiscott (ISICR) was not able to participate in this meeting. However, he sent a final financial accounting report to each Society. The Joint Meetings Committee thanks John and his Organizing Committees for their successful efforts in producing a conference reflecting scientific excellence. This meeting was the 7th joint meeting of the two societies. The conference dates were October 12-16, 2008 at the Fairmont Queen Elizabeth Hotel. There were a total of 790 participants coming from 43 countries. The registration breakdown was reported as: 260 from ICS; 190 from ISICR; 340 nonmembers; 249 students; 80 from Industry. The number of abstracts submitted was 450. All invited speakers (57) received travel funds and waived registration fees. Total expenses were reported to be $598,620 (Canadian) and total income was reported to be $561,849 (Canadian) which included $221, 569 (Canadian) from Sponsors. At the time of the reporting, the US and Canadian dollar were equivalent. The reports indicated that the deficit was covered by other sources and the Organizers were able to return the seed start-up funds provided by each society. In past discussions, John expressed the opinion that when considering future meetings seed start-up funds of $25,000 (US) from each society is a reasonable amount.

2009 – Lisbon, Portugal

Scott Durum (ICS) and Michael Tovey (ISICR) shared a presentation of the current 2009 Joint Meeting of the SLB, ICS and ISICR which took place at the Lisbon Congress Center in Lisbon, Portugal on October 17-21, 2009. The theme of the conference is "Cellular and Cytokine Interactions in Health and Disease". Current number of registrants is reported as a total of 771 participants coming from 51 countries with a breakdown as follows: 98 ICS members; 190 ISICR members; 129 SLB members; and 354 nonmembers. Registrants included 353 students. There were 117 invited speakers. The Organizers report: estimated income of $562,000 (US) which includes seed start-up funds of $20,000 (US) from each of the 3 Societies; estimated expenses of $554,00 (US); estimated profit of $74,920 (US) leading to an estimated profit to each of the 3 societies of $24,973 (US) which includes the $20,000 (US) seed start-up funds. The committee members thanked the Organizers for their efforts to date and expressed unanimous sentiments of looking forward to an excellent conference.

2010 – Chicago, Illinois, USA

Leon Platanias (ISICR) provided the update for the 2010 Joint ISICR/ICS meeting. The meeting will take place at the Hyatt Regency in Chicago's "Magnificent Mile" on October 3-7, 2010. The theme of the meeting is "Cytokines in infectious diseases, autoimmune disorders and cancer". The Executive Committee has been formed and keynote speakers have been decided upon. A block of rooms has been reserved at the Hyatt Regency and a (US) government rate has been granted. The Organizers' current budget estimates expenses and income of approximately $600,000 (US) each and the Organizers efforts with fund raising will go into full effect after the 2009 Lisbon Meeting.

2011 – Florence, Italy

Santo Landolfo (ISICR) presented an update on the joint ISICR/ICS Meeting which will take place in Florence, Italy on October 9-12, 2011. The Congress Citadel in city centre has been reserved. The Congress center is located close to the train station in Florence within close proximity to hotels of varying price range. Current activities are focused on forming the various committees for planning the meeting: Local Organizing Committee; Scientific Program Committee; Business Management Service. The current budget for expenses/income is 440,000 Euros.

Beyond 2011

We were fortunate to have two presentations of proposals for future Joint ISICR/ICS Meetings.

Cem Gabay (ICS) presented a proposal for Geneva, Switzerland (proposing 2012 September or October, dates to be determined). The proposed venue is the Centre International de Conference de Geneve. A proposed budget for 700 attendees and expenses/income of 620,000 Swiss Francs (US dollar and Swiss Franc are currently equivalent) was presented. The meetings committee members discussed the need to keep the Jewish Holy days in mind when planning conference dates; and also provided a reminder that a Joint ISICR/ICS Meeting was held in Geneva in 1996.

Paul Hertzog (ISICR, ICS) presented a proposal for Melbourne, Australia (proposing October 2013). The proposed venue is the newly-opened Melbourne Convention and Exhibition Centre. Regarding the scientific focus of the conference, in addition to cytokine and interferon based research, sessions will focus on the rapidly growing pathogen recognition receptor (PRR) field. The presentation included description of a provisional National Organizing Committee, representing world leaders in the cytokine, interferon and PRR communities in Melbourne, Sydney, Adelaide, Brisbane and Perth. A proposed budget for 600 delegates is being developed.

Discussion of the two proposals was positive. There was some discussion that we should consider holding joint meetings in the US every three years. These discussions will continue at the next meeting of the Joint ISICR/ICS Meeting which will take place in 2010 in Chicago.

There was no other business to discuss and the Meeting was adjourned.

Respectfully submitted,
Christine Czarniecki
Chair, ISICR Meetings Committee
and
Co-Chair of the Joint ISICR/ICS Meetings Committee

ISICR Membership Committee

Meeting Date: **October 18, 2009**
Location: **Lisbon, Portugal**

The only member of the membership committee present was Ana Gamero and Howard Young acted as ad hoc chair. Ana and Howard recommended that, once a month, membership committee members go through an appropriate journal and identify up to 5 papers with an emphasis on interferon and cytokines. Upon identifying such papers, the email addresses of the corresponding authors would be sent to the ISICR business office and the business office would then send an email introducing the corresponding author to the ISICR. This email should contain information about the society, the most recent ISICR newsletter and membership dues information, emphasizing the availability of awards for society members. It is felt that many people in Interferon/cytokine research are not aware of the society and that this type of outreach may well result in new members.

Respectfully submitted,
Howard Young

ISICR Nomenclature Committee

Meeting Date: **October 18, 2009**
Location: **Lisbon, Portugal**

The meeting was called to order at 10.30 am, October 18, 2009 at the Tri-Society Annual Conference, Lisbon, Portugal.

Members present: S. Kotenko, E. Lundgren, A. Dolei. D. Koltchev was associated to the meeting. AD was chosen to write the minutes. The minutes were distributed to the other members for information and input.

1. The minutes from the previous meetings have been distributed, no further actions taken.
2. Report from Herzog et al., on a putative mouse IFN-ε gene will await functional data before decisions are made.
3. The letter of Maria Leptin (Köln University) asking the approval of the ISICR Nomenclature Committee for a proposed naming of interferon genes in the zebrafish and other teleosts was discussed. She proposed that the zebrafish genes currently named IFN1-4, IL-26, and IL-22 should be renamed IFNφ1 to IFNφ6, based on their sequence comparison, and that they should be considered as counterparts of the mammalian type III IFNs based on the intron/exon structure of their genes. The greek letter should stay for "fish" IFNs. The related papers (Stein et al., Genome Biology 2007, 8:R251 and Aggad et al., Journal of Immunology, 2009, 183: 3924–3931) were analyzed and discussed. Protection in a viral challenge assay was observed for the zebrafish IFNs called IFN φ1, φ2, and φ4 (Lopez-Munoz et al. *J. Immunol.* 182: 3440–3449, 2009; Aggad et al., 2009). Antiviral effector proteins were shown to be induced by all interferons, IFNφ1, IFNφ2, IFNφ3 and IFNφ4 (viperin, MXA).

   The Committee felt the need of rules for the denomination of new IFNs (see Point 4, below), and agreed to accept the φ greek letter, not for "fish", but as one of the greek letters available.

   It was agreed that at present time only four of the six proposed zebrafish IFNφ have been shown so far to possess the features of true IFNs (see point 4). Fish IFNs that have been identified to date, revealed higher percentage of amino acid similarity to mammalian Type I IFNs than to mammalian Type III IFNs, however the intron-exon structure of their genes resembles those of mammalian Type III IFNs. Therefore, fish IFNs can not be currently assigned to either Type I or Type III IFN subfamilies.

The committee decided that the zebrafish IFNs known as IFN1-4 can be renamed as IFNφ1- IFNφ 4. As for the zebrafish proteins named IL-22 and IL-26 based on their sequence similarity to mammalian IL-22 and IL-26, and proposed to be renamed as fish IFNφ6 and IFNφ5, respectively, there are currently no functional data supporting their IFN identity. Therefore further studies are required before decisions can be made on these molecules.

4. To avoid confusion in the denomination of newly discovered IFNs, the Nomenclature Committee agreed to draw up the rules that can be used by this Committee and others for the designation of new molecules as IFNs. A document will be written and diffused to the sister Scientific Societies and to the HUGO Gene Nomenclature Committee.

Respectfully submitted
Antonina Dolei
Erik Lundgren

ISICR Publication Committee

Meeting Date: **October 18, 2009**
Location: **Lisbon, Portugal**

In this difficult economic time, most of the Publication Committee members were unable to attend the Annual Meeting of the International Society for Interferon and Cytokine Research (ISICR). Thus, the Publications Committee conducted its annual meeting by multiple on-line contacts.

In keeping with our contract with Mary Ann Liebert, Inc., several positions on the Editorial Board of the Journal of Interferon and Cytokine Research (JICR) were up for renewal/replacement. The Publications Committee carefully considered the Editor's nominations for new Editorial Board members. There was much discussion and concern that Editorial Board members should play a leadership role in reviewing manuscripts for the JICR and publishing in the JICR. The Publications Committee approved five new Editorial Board members.

Tom Hamilton and Ganes Sen provided their report of the Status of the JICR to the Publications Committee. There was some concern that the number of manuscripts published and the total number of pages published in the JICR has been declining in recent years. It was also noted that the Citation Index dropped somewhat last year. However, this one-year decrease is not believed to be significant and most probably reflects an expected variation around a mean of about 2.2.

1. It is clear that the trend toward fewer manuscripts and fewer pages could be reversed if members of the ISICR and, particularly, members of the Editorial Board would be more active in publishing in the JICR.
2. The Editors proposed a number of new initiatives that will be implemented to try to encourage greater support of the JICR by ISICR members.

The Publications Committee recognizes that the Editors are providing wonderful leadership in their management of the JICR under difficult circumstances and commend them for their outstanding service on behalf of the JICR and of the International Society for Interferon and Cytokine Research.

The Publications Committee discussed an offer from Mary Ann Liebert, Inc. that would link membership in the ISICR with on-line subscription to the JICR. After careful deliberation, the Publications Committee approved this offer and recommended acceptance by the Board of Directors. In considering this recommendation, the Board of Directors raised several concerns and suggested that the Chair of the Publications Committee should take the lead in continuing to negotiate with Mary Ann Liebert, Inc. in order to arrive at a mutually beneficial agreement.

Respectfully submitted,
Bob Fleischman
Chair

Additional Report to the ISICR Membership – Publications Committee

At our last Annual Meeting, Vicki Cohn of Mary Ann Liebert proposed that the International Society for Interferon and Cytokine Research agree to link society membership with on-line subscription to the Journal of Interferon and Cytokine Research. She proposed that the cost per member for on-line subscription linked to society membership would be $35 per year.

For several years, the ISICR and Mary Ann Liebert (MAL) have been discussing the possibility of linking membership in the ISICR to JICR subscription. Originally, the proposal was to require linkage of ISICR membership with hard-copy JICR subscription. This proposal was not accepted by the membership of the ISICR. There were two principal issues. First, there was concern for the high cost involved in hard-copy JICR subscription. Second, there was concern about laboratories with multiple ISICR members who did not need and could not afford multiple hard-copies of JICR.

Then, more than 5 years ago, MAL proposed linkage of ISICR membership with on-line JICR subscription at a relatively low cost to subscribers.

The exact cost was ultimately to be determined by the number of subscribers. As best I recollect, the on-line JICR costs were proposed in the range from about $30-$50, with the best price of $30 being available only if all members of the ISICR were to subscribe.

The proposal was seriously considered by the ISICR Executive Committee and the International Council. There was a lot of discussion, both for and against accepting the proposal.

Ultimately, it was decided not to accept the proposal. Two of the factors were the cost for members from poorer nations and the duplication of subscriptions in a given laboratory. Perhaps the deciding factor was the limited availability of the journal issues on -line, as there was no plan to make back issues available on-line unless the ISICR would underwrite it. The ISICR decided that it did not have the resources to do this.

Recently, MAL has digitalized the back issues at their expense and the full archive of the JICR is or soon will be available on-line. In light of this achievement, at our last ISICR Annual Meeting in Montreal, members of the leadership of the ISICR urged reopening discussion with MAL about the possibility of linking ISICR membership to JICR on-line subscription. The Publications Committee was charged with taking the lead on this.

The members of the Publications Committee have considered Vicki's offer and would like to recommend to you that the ISICR should accept her offer in principle. We have several sub-recommendations.

1. We would recommend that the ISICR negotiate with Vicki to determine whether MAL would compromise on a cost of $30 per member, the previous offer if all members subscribed.
2. We would recommend that the ISICR should obtain a waiver from this agreement for ISICR members who are from very poor countries (to be mutually decided by ISICR and MAL).
3. We would recommend that the offer and its acceptance should be in writing and for a limited trial period. A minor concern is that, once we agree to link society membership and on-line journal subscription, the price might rise dramatically in future years. The written offer and acceptance would constitute a good-faith contract that should set the price for the limited trial period. The limited trial period should provide the opportunity for MAL to modestly increase the price, if needed, at the end of the trial period. The limited trial period would also permit the ISICR to decide not to continue the agreement at the end of the trial period, if the cost was deemed to be too high or if the ISICR was not satisfied with the linkage.

Thank you for your consideration of this recommendation.

Publications Committee
W. Robert Fleischmann, Jr., Chairperson
Manfred Beilharz
Joan Durbin
Cassandra James
David Levy
Margaret Sekellick
Jeremiah Tilles
Deborah Vestal
Thomas Hamilton (Ex-officio)
Ganes Sen (Ex-officio)

ISICR Standards Committee

Meeting Date: **October 18, 2009**
Location: **Lisbon, Portugal**

The meeting was called to order on Sunday, October 18, 2009. Members present : Darren Baker (representing Vijay Jethwa), Sidney Grossberg, Kazuko Uno (representing Masayoshi Kohase), and Michael Tovey (chair). The following members elect were invited to attend the meeting prior to the start of their official term in 2010: Anna Costa-Pereira, Meena Subramanyam, and Robin Thorpe. Howard Young was also invited to attend as a guest. The following topics were discussed:

Standardization of cytokine protein analysis

Howard Young, NCI Frederick, presented the need for the standardization of cytokine protein analysis. The ability to monitor cytokine expression in experimental and clinical samples is an essential element of modern molecular biology and is increasingly being considered in the evaluation of the response of individual patients to specific therapies. Multiplex analysis, of cytokine protein expression is often dependent upon the use of two antibodies, one for capture and one for detection. The use of different antibody pairs and different platform technologies by suppliers renders standardization difficult. Robin Thorpe, NIBSC, UK, presented the findings of an international symposium convened by the NIBSC to discuss the standardization, calibration and validation of such assays (Wadhwa M., and Thorpe R., J. Immunol. Methods, 1998, 219:1-5). The ISICR Standards Committee concluded that manufacturers and users of such assays should be encouraged to incorporate for each assay an in-house cytokine standard calibrated against the homologous International Reference Preparation. It was decided to contact the editors of journals that publish data obtained using such assays to encourage authors to use cytokine standards.

Reference Preparations for PEGylated Cytokines

Darren Baker, Biogen-Idec, Cambridge, presented an overview of the different types of PEGylation chemistry commonly employed in industry and the range and characteristics of PEGylated cytokines currently on the market or in development. The multiple forms of PEGs (size, linear, branched, pendant, homo- and heterobifunctional etc.), site(s) of modification (single or multiple on a molecule or population basis), the inherent polydisperity of the PEG itself, and the effects that such modifications can have on in vitro potency, and in vivo pharmacokinetics and pharmacodynamics were reviewed. The Committee concluded that given the level of complexity of PEGylated proteins it may not be feasible to use a single standard for a given PEGylated cytokine and that the unmodified protein (cytokine) standard should be used to normalize activities of different preparations.

Reference Preparations for Biosimilars

Robin Thorpe, NIBSC, UK, outlined the European perspective on Biosimilars. Due to the complexity of biological medicinal products a generic approach is scientifically not appropriate for such products. The quality of the Biosimilar has to be shown to be comparable to that of the reference medicinal product. The committee concluded that the International Reference Preparation, if available, should be used to calibrate potency assays for biosimilars.

Reference Preparations for Human Anti-drug Antibodies

Patients treated with cytokines such as interferon-beta may produce antibodies against the cytokine that can adversely affect the efficacy of treatment. There is a need to standardize immunogenicity data obtained in different clinical studies using different drugs and different assays. Michael Tovey, CNRS, Villejuif, outlined the various options available. The committee concluded that the use of animal polyclonal anti-cytokine antibodies as standards was inappropriate due to their heterogeneous nature; varying mixtures of antibodies of different epitope specificity, different isotype, avidity and affinity. Similarly, the use of human polyclonal anti-cytokine antibodies as standards was considered to be unsuitable due to the difficulty in sourcing such antibodies and changes in the affinity, and immunoglobulin isotype that occur during therapy. The Committee concluded that the currently available International Reference Preparation, or homologous in-house standard, for a particular cytokine should be used to standardize immunogenicity assays.

New Cytokine Reference Preparations

Robin Thorpe, NIBSC, UK, outlined the progress being made on new cytokine reference preparations. A reference preparation for IL-23 should become available in early 2010. A reference preparations for IL-29 (IFN lambda 1) is in preparation. Reference preparations for BLyS and TGF-beta 3, should become available in the first quarter of 2010.

Other Business

Sidney Grossberg, Medical College of Wisconsin, informed the Committee that he has provided to the Interferon Archives of the Wellcome Library, London, copies of NIH Reference Reagent Notes that describe a variety of IFNs and antibodies produced for the NIH as reference and standard materials.

The meting concluded with a tribute to Professor Sidney Grossberg for his outstanding contribution as past Chair of the Committee.

Respectfully submitted,
Michael Tovey
Chair, ISICR Standards Committee

International Society for Interferon & Cytokine Research Statement of Financial Position as of September 30, 2009

2009 ASSETS	
Cash - Bank of America	$ 67,359.96
Cash - Business Interest Maximizer	41,285.73
Cash - Bank of America CD	108,497.23
CD Interest Receivable	37.95
Accounts Receivable General	4,290.00
Prepaid Expenses - 2009 Annual Meeting	20,000.00
TOTAL ASSETS	$ 241,470.87
LIABILITIES	
Due to Publisher-Print Only	$ 289.00
Due to Publisher- Online Only	
Accounts Payable	5,760.20
Deferred Dues - Emeritus Member 2010	105.00
Deferred Dues - Emeritus Member 2011	50.00
Deferred Dues - Regular Member 2010	4,960.00
Deferred Dues - Regular member 2011	2,170.00
Deferred Dues - Regular Member 2012	1,240.00
Deferred Dues - Regular Member 2013	610.00
Deferred Dues - Student Member 2010	590.00
Deferred Dues - Student Member 2011	590.00
Deferred Dues - Post Doc Member 2010	220.00
Deferred Dues - Post Doc Member 2011	220.00
TOTAL LIABILITIES	16,804.20
NET ASSETS	
Temporary Restricted Contribution Recorded in Current Year	61,500.00
Temporary Restricted Contribution Recorded in Prior Year	2,800.00
Unrestricted	160,366.67
TOTAL NET ASSETS	224,666.67
TOTAL LIABILITIES AND NET ASSETS	$ 241,470.87

EUROPEAN SOCIETY for VIROLOGY

www.eusv.eu / www.european-virology.eu

The European Society for Virology provides a forum for scientists active in all aspects of virology. The stated aim of the Society is to advance the art and science of virology and to promote and stimulate the exchange of information and collaboration among individual scientists as well as among national and international associations of virology throughout Europe.

These goals are achieved by organizing regular scientific meetings, promoting virological education at all levels and by representing the science and profession of virology to governmental and regulatory institutions of the European Union, the media and the general public. The Inaugural Meeting of the Society was held at the Campidoglio (City Hall) in Rome on April 24, 2009 and the next ESV meeting will be April 7-11, 2010, Cernobbio, Lake Como at the Italy Villa Erba Congress Center. The European Virology Award 2010 will go to Peter Palese for his work on influenza viruses. The Award is given to individuals who have made exceptional contributions of great theoretical and / or practical importance in the field of Virology. It recognizes top scientific achievements with far-reaching implications for plant, animal or human health and is presented every 3 years during the European Congress of Virology. The first Award went to Jean Lindenmann, University of Zurich, Switzerland for this 1957 discovery of interferons together with the late Alick Isaacs.

4th European Congress of Virology

President
Otto A. Haller, Department of Virology, University of Freiburg, Freiburg, Germany
E-Mail: haller.office@uniklinik-freiburg.de

First Vice-President
Giorgio Palù
President S.I.V. (Italian Society of Virology), Microbiology Department, Medical School, University of Padua, Padua, Italy
E-Mail: giorgio.palu@unipd.it

Second Vice-President
Ben Berkhout, Laboratory of Experimental Virology, Department of Medical Microbiology, Center for Infection and Immunity Amsterdam (CINIMA)
Academic Medical Center of the University of Amsterdam, Amsterdam, The Netherlands
E-Mail: b.berkhout@amc.uva.nl

Treasurer
Gabriella Campadelli-Fiume, Section of Microbiology and Virology, University of Bologna, Bologna, Italy
E-Mail: gabriella.campadelli@unibo.it

Secretary General
Bernhard Fleckenstein, Institute of Clinical and Molecular Virology, University of Erlangen-Nuremberg, Erlangen, Germany
E-Mail: fleckenstein@viro.med.uni-erlangen.de

Written by **Regina Brett**, 90 years old, of The Plain Dealer, Cleveland, Ohio

1. Life isn't fair, but it's still good.
2. When in doubt, just take the next small step.
3. Life is too short to waste time hating anyone...
4. Your job won't take care of you when you are sick. Your friends and parents will. Stay in touch.
5. Pay off your credit cards every month.
6. You don't have to win every argument. Agree to disagree.
7. Cry with someone. It's more healing than crying alone.
8. It's OK to get angry with God. He can take it.
9. Save for retirement starting with your first paycheck.
10. When it comes to chocolate, resistance is futile.
11. Make peace with your past so it won't screw up the present.
12. It's OK to let your children see you cry.
13. Don't compare your life to others. You have no idea what their journey is all about.
14. If a relationship has to be a secret, you shouldn't be in it.
15. Everything can change in the blink of an eye. But don't worry; God never blinks.
16. Take a deep breath. It calms the mind.
17. Get rid of anything that isn't useful, beautiful or joyful.
18. Whatever doesn't kill you really does make you stronger...
19. It's never too late to have a happy childhood. But the second one is up to you and no one else.
20. When it comes to going after what you love in life, don't take no for an answer.
21. Burn the candles, use the nice sheets, wear the fancy lingerie. Don't save it for a special occasion. Today is special.
22. Overprepare, then go with the flow.
23. Be eccentric now. Don't wait for old age to wear purple.
24. The most important sex organ is the brain.
25. No one is in charge of your happiness but you.
26. Frame every so-called disaster with these words. 'In five years, will this matter?'
27. Always choose life.
28. Forgive everyone everything.
29. What other people think of you is none of your business.
30. Time heals almost everything. Give time time.
31. However good or bad a situation is, it will change.
32. Don't take yourself so seriously. No one else does.
33. Believe in miracles.
34. Don't audit life. Show up and make the most of it now.
35. Growing old beats the alternative – dying young.
36. Your children get only one childhood.
37. All that truly matters in the end is that you loved.
38. Get outside every day. Miracles are waiting everywhere.
39. If we all threw our problems in a pile and saw everyone else's, we'd grab ours back.
40. Envy is a waste of time. You already have all you need.
41. The best is yet to come.
42. No matter how you feel, get up, dress up and show up.
43. Yield.
44. Life isn't tied with a bow, but it's still a gift.

THE ISICR SLIDE REPOSITORY

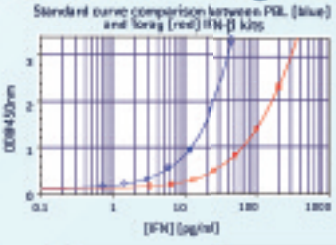
Ever see a slide in a talk that you wish you could use for your own presentation? Well now this may be possible through the ISICR Slide Repository. Members can now go in and post slides that they have developed or download slides that others have provided to the membership. OVER 500 SLIDES ARE NOW AVAILABLE!!!!!! For this member only feature, you need to have your member number so if you are not sure what that is, please contact the membership office. We urge members to upload general slides that other members can use for lectures, classes, seminars, etc. Slides are not to be changed without permission from the donor and all copyright permissions must be obtained. The repository now has a useful search capability that allows you to find slides on a particular topic. If you have trouble uploading or downloading slides, please contact Howard Young at younghow@mail.nih.gov.

pbl interferon source

The only thing more sensitive than our new kit is Hannah...

Introducing the VeriKine-HS™ Human Interferon-Beta Serum ELISA kit from PBL

While true, this kit is great too!



Hannah has over 600 million olfactory cells making her sense of smell 3 million times more sensitive or acute than that of humans!

The *VeriKine-HS™* Human IFN-β Serum ELISA kit sets new standards for sensitivity and reliability in the measurement of Human Interferon-Beta (IFN-β) levels in different sample matrices, such as serum, plasma, and cell culture supernatants. Additionally, this kit:

- Detects as little as 1.5 pg/ml (0.5 IU/ml)
- Maintains <8% inter- and intra-assay CV
- Exhibits a high signal-to-noise ratio
- Does not react with heterophilic antibodies, clotting factors, or serum proteins minimizing false positive results.

This increased sensitivity allows the detection and quantification of basal human IFN-β enabling greater insight into the early immune response.

Call now +1.732.777.9123 or visit us at www.interferonsource.com/beta for more information

Copyright©2009. Pestka Biomedical Laboratories, Inc. All rights reserved.

SCIENTIFIC ORGANIZING COMMITTEE

Leonidas Platanias (Chair) Curt Horvath Carl Ware
Scott Durum Warren Leonard Howard Young
Eleanor Fish George Stark

TOPICS TO INCLUDE

Cytokines and Inflammation • Cytokine Signaling • Novel Therapeutic Targets in Malignancies • Cytokine-based Therapies • Cytokine and Immunoregulation • MicroRNAs and Post-Transcriptional Regulation • Pattern Recognition • Infectious Agents and Cytokine Induction • Interferons and Viral Infections • Cytokine in T Cell Biology/Adaptive Immunity • Stats/NFkB and Cancer • Cytokines in Immune Cell Development and Differentiation • Cytokines and Cell Death • Cytokine and GWAS-Markers for Disease • Methods of Cytokine Detection • Cytokines and Orphan Diseases • Cytokine and Parasitic Diseases

For additional conference information, visit www.cytokines2010.com. For Sponsorship and exhibitor information, contact cytokines2010@proactivemeetings.com.

676 North St. Clair Street, Ste 1200
Chicago, IL 60611-2953

October 3-7, 2010

Cytokines CHICAGO 2010

International Society for Interferon & Cytokine Research

INTERNATIONAL SOCIETY FOR INTERFERON AND CYTOKINE RESEARCH
9650 Rockville Pike, Bethesda, Maryland 20814-3998 USA
Telephone: (301) 634-7250 • Fax: (301) 634-7455
WEBSITE: http://www.isicr.org • EMAIL: ISICR@faseb.org

2010 MEMBERSHIP APPLICATION: New Renewal

Name _____ _____ _____
First Middle Last

Department _____

Organization _____

Address _____

_____ _____ _____ _____
City State/Province Zip Country

Note: Street address and zip+4 now required by Postal Service for delivery (US Only)

Telephone _____ Fax _____

E-Mail address:_____

PLEASE RETURN THIS APPLICATION WITH YOUR REMITTANCE

U.S. Currency ONLY (checks to be drawn on a U.S. Bank)

Make checks payable to: ISICR or International Society for Interferon and Cytokine Research

For Credit Card payments, see below.

ISICR Federal Tax ID #: 59-2471233

Dues payments entitle a member to receive the annual Directory of Members, Newsletters, annual meeting program, and all meeting announcements.

MEMBERSHIP DUES	ONE-YEAR	TWO-YEAR	THREE YEAR	FIVE YEAR
Regular Member (2010)	$50.00	$90.00	$120.00	$200.00
Emeritus Member (2010)	$20.00	$35.00	$45.00	N/A
Student and/or Postdoctoral Fellow Member (2010)	N/A	N/A	$30.00	

(Students/post-docs please complete box on lower portion of form)

Life Member (Must be over 55) $500.00

JOURNAL OF INTERFERON AND CYTOKINE RESEARCH

2010 Member Rates	$298.00 (USA Print)	$298.00 (Foreign Print)
	$357.00 (USA Print & Online)	$357.00 (Foreign Print & Online)
	$298.00 (USA Online Only)	$298.00 (Foreign Online Only)

TOTAL PAYMENT $_____

Online questions, contact the Publisher (Mary Ann Liebert) directly at (914) 740-2100.
To assure proper crediting of dues and processing of Journals, please remit dues promptly.

CREDIT CARD INFORMATION (PLEASE TYPE OR PRINT LEGIBLY)

American Express VISA Master Card Discover

Card Number_____ Name on Card_____

Expiration Date_____AuthorizedSignature_____

NOTE: Credit Card Charges will be processed by the Federation of American Society for Experimental Biology.

STUDENT/FELLOW MEMBERSHIP (PLEASE TYPE OR PRINT LEGIBLY)

I certify that _____is a candidate for an advanced degree or a post-doctoral fellow in a field related to Interferon and Cytokine Research

Institution_____Department_____

_____

(Signature of applicant's major research advisor)

Reproduced with permission Nick D. Kim, Nearing-Zero.net

Meeting of Interest

Immunology in the 21st Century: Defeating Infection, Autoimmunity, Allergy and Cancer

http://www.ici2010.org/index.html

REMEMBER TO **JOIN** THE ISICR OR **RENEW** YOUR **ISICR MEMBERSHIP** FOR 2010 OR BEYOND (3 AND 5 YEAR MEMBERSHIPS ARE AVAILABLE)

Signals

ISICR
International Society for Interferon & Cytokine Research
9650 Rockville Pike
Bethesda, MD 20814-3998
USA